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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,307	01/22/2004	Richard Edward Dubreuil	DWE/DUBREUIL	3088
32834	7590	05/02/2007		
D.W. EGGINS 18 DOWNSVIEW DRIVE BARRIE, ON L4M 4P8 CANADA			EXAMINER ALI, MOHAMED HATEM	
			ART UNIT 3609	PAPER NUMBER
			MAIL DATE 05/02/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/761,307

**Applicant(s)**

DUBREUIL, RICHARD EDWARD

**Examiner**

Mohamed H. Ali

**Art Unit**

3609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities:

On page 6 at line 4, character 28 is referred to "mid-section outer surfaces 28", and on page 7 at line 22, it is referred to "double-thickness portions 28".

Consistency is required.

### ***Claim Objections***

2. Claims 7, 9, 10, 13, 16-18 are objected to because of the following informalities: these claims are missing the transitional between the preamble and the claimed limitation. For example, in claim 7, the term --wherein-- should be added after the preamble.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, at line 4, the recitation "and subject to longitudinal compressive loading" renders the claim indefinite since it is unclear which structure is subject to the

Art Unit: 3609

longitudinal load. Is Applicant referring to the enclosing framework or the plurality of pairs of load bearing? Clarification is required.

In claim 2, at line 4, the recitation "said strut pairs" lacks proper antecedent basis.

In claim 4, the recitation "at least one portion intermediate said end portions" renders the claim indefinite since it is unclear if Applicant is referring to the upper and lower end portions.

In claim 9, the recitation "a said pair of struts" is unclear.

In claim 18, the recitation "having plastic foam in supporting relation with said strut intermediate portions" renders the claim indefinite since it is unclear where that plastic foam is located. Further, the recitation "in use to resist lateral deformation" is indefinite as to what is in use.

Clarification is required.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5, 7, 10, 11 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Leung (US 2002/0046514 A1).

As per claim 1, Leung discloses a wall frame structure (10,110, 510) having an enclosing framework (as illustrated in Fig. 5 and 11), including a plurality of pairs of load-bearing, substantially upright strut members (diagonal members 22) having intermediate longitudinal portions thereof in mutually inclined relation, contained within said framework, and subject to longitudinal compressive load (see Fig 13).

As per claims 2 and 3, Leung discloses strut members (diagonals 22s of inclined two pairs) are of slender section modulus, prone to individual buckles under said longitudinal compressive loading, said strut pairs having their individual outer ends joined (outer ends 26 and 30 joined), and being mutually joined and substantially immobilized at a location intermediate their ends and members of said frame structure laterally constrain said strut members ( via vertical members 12).

As per claim 4, Leung discloses that upper and lower end portions, and at least one portion intermediate said upper and lower end portions of a pair of said strut members are secured to each other (see paragraph [0034], and fastened in predetermined locations within said framework (by metal plate 30).

As per claim 5, Leung discloses that upper and lower ends of a pair of said strut members are secured to each other, and attached to an adjoining, laterally extending member of said framework (see Fig. 13).

As per claim 7, Leung discloses said frame structure including face sheets in enclosing relation with said strut members, wherein said strut members have sheets edge portions thereof secured to adjoining surface portions of said face sheets (See para 0006; via plywood nailed to the stud).

Art Unit: 3609

As per claims 10 and 11, Leung discloses said pair of struts being laterally constrained at their centre (centre 26) by contact with adjoining pairs of said struts at the centre by the contact with an adjoining portion of said framework (510) and by fastening means selected from the group consisting of nails, staples and glue, and combination thereof (by metal toothed plate 30).

As per claim 14, Leung discloses the struts selected from wood-based sheetboard and metal (see para 0052).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6, 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leung (US 2002/0046514 A1) in view of Kirk (5,210,990).

As per claims 6 and 8, Leung discloses all the elements of the claimed invention, but failed explicitly disclose upper and lower ends of a pair of said strut members are glued to each other, and to adjoining surface portions of said face sheets.

Art Unit: 3609

However Kirk discloses the concept of having a wood composite C-channel framing lumber (see col. 3, lines 1-50) as strut with upper and lower ends and adjoining surface portion are glued to each other (see col. 3, lines 31-35) and said face sheets.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the struts of Leung to include the C-channel framing lumber that are glued to each other as taught by Kirk in order to provide perfect straightness and uniform surface character.

As per claim 9, Although Leung discloses a pair of struts constrained at their centre, Leung fails to explicitly disclose the struts being constrained substantially at their centre by contact with adjoining pairs of struts. It would have been obvious to one of ordinary skill in the art at the time the invention was made to the pair of struts of Leung to include the plurality of pairs adjoined at their centre since it has been held that the mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

9. Claims 12-13, 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leung (US 2002/0046514 A1) in view of Cable et al (4,235,054).

As per claims 12 and 13, Leung discloses all the elements of the claimed invention, but fails to explicitly disclose a laterally extending tension member securing intermediate portions of said struts in mutually adjoined relation and the tension member is consisting of strapping.

However Cable et al discloses the concept of having a laterally extending tension member (55) securing intermediate portions of webs (42) in mutually adjoining relation (see Fig. 2), and the tension member is an iron bar.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention was made to modify the panel of Leung to include the laterally strapping extending tension member as taught by Cable in order to provide lateral reinforcement of the wall section.

As per claims 15-17, Leung discloses the metal and plastic struts having a profile cross section with side flanges extending for at least two or four portions of its length substantially planer end and centre portions.

However Cable discloses the concept of having metal studs including a profile section with side flanges (see col. 2, lines 32-40 and Fig. 3-4).

Therefore, it would have been obvious to an ordinary skill in the art at the time of invention was made to modify the struts of Leung to include the metal studs with flanges as taught by Cable in order to provide more load-bearing capacity and more rigidity.

10. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Leung (US 2002/0046514 A1) in view of Griffin (US 6,263,628 B1).

As per claim 18, Leung discloses all elements of the invention, but fails explicitly to disclose a plastic foam in supporting relation with said strut intermediate portions, in



Art Unit: 3609

use to resist lateral deformation of said struts when subjected to said compressive loading.

However Griffin discloses a plastic foam in supporting relation with said intermediate portions, in use to resist lateral deformation of said struts when subjected to said compressive loading (see column 6 and lines 15-25; via foam core 12).

Therefore, it would have been obvious to an ordinary skill in the art at the time of invention was made to modify the wall panel of Leung to include the plastic foam in supporting relation with said strut intermediate portions as taught by Griffin in order to provide strong insulation properties and superlative load bearing capacity.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Timmerman et al (US 2002/0108332 A1) discloses a lateral force resisting system including a rigid structural panel and holdowns.

Alexandre (US 6, 385,937 B1) discloses modularized structure framing.

diGirolama(US 6,892,504 B1) discloses wall structure with corner connectors.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohamed H. Ali whose telephone number is 571-270-3021. The examiner can normally be reached on 7-30 to 5.00.

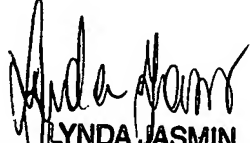
Art Unit: 3609

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynda Jasmin can be reached on 571-270-3033. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mohamed H Ali  
Examiner  
Art Unit 3609

MA

 4/30/07  
LYNDA JASMIN  
SUPERVISORY PATENT EXAMINER